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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
MEONSKE, TONIA L	
ART UNIT	**PAPER NUMBER**
2181	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/750,733	WEISS ET AL.	
	Examiner	Art Unit	
	Tonia L. Meonske	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on March 13, 2006. These drawings are approved.

Claim Objections

2. Claim 4 is objected to for containing a grammar error. Lines 8 and 9 claim "data-stationary commands splitted on several instruction words" which is unclear. Does Applicant mean for "splitted" to be "split" instead? Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 4-8 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Cmelik et al., US Patent 6,031,992 (herein referred to as Cmelik).

5. Referring to claim 4, Cmelik has taught a method for operating a processor with the improvement wherein the operation of the processor is divided in an execution phase and a preceding configuration phase (In Cmelik the instructions are translated and then the instructions are executed. See column 19, lines 52-65. The translation, or configuration stage, precedes the execution phase of the instructions.), wherein during the preceding configuration phase instruction word parts corresponding to data-stationary commands splitted on several

instruction words (column 9, lines 51-65, Commands of several instruction words are translated, optimized, reordered, and rescheduled.) are assembled as complex words in a complex word sequence, identified by a complex word pointer and stored in a complex word table at a location corresponding to said pointer (Cmelik column 9 lines 51-65, Several instruction words are translated, optimized, reordered, and rescheduled into very long instruction words.), wherein said complex word pointers are provided as program words corresponding to said data-stationary commands (Cmelik figure 8, column 19 line 31-column 20 line 4; The address of the sequence that was already been translated as the branch address for the particular condition controlling the branch. Wherein data-stationary commands is interpreted from page 2 in the specification as a command that does not have definite information by what route a processor is to execute the command, which is taught since Cmelik teaches multiple units for memory, integer and fp instructions.), and wherein upon encountering said complex word pointers in said program words during the subsequent execution phase, said complex words are read from said complex word table and stored in parallel in the corresponding rows and columns of said secondary instruction word memory (Cmelik, Figure 2 and 8, column 19 line 31-column 20 line 54, In Cmelik the instructions are translated and then the instructions are executed. See column 19, lines 52-65. The translation, or configuration stage, precedes the execution phase of the instructions. Instructions are translated and stored in the rows and columns of translation buffer, element 14. Separate instructions are stored in rows of the translation buffer and the instruction code and address bits of the instructions are stored in the columns of the translation buffer.).

6. Referring to claim 5, Cmelik has taught the method as specified in claim 4, as described above, and wherein said complex words further include assignments for storage of said complex

words in said secondary instruction word memory (Cmelik, Figure 7, column 15 line 21-column 16 line 34, As shown in the figure, once the words are translated they are added to the buffer so that they can be used again without translating them again. The translated instructions would require some address or index in the buffer.).

7. Referring to claim 6, Cmelik has taught the method as specified in claim 4, as described above, and wherein said secondary instruction word memory is operated in a fixed sequence (Cmelik, Figure 7, column 15 line 21-column 16 line 34, Since the reordering and scheduling are done before the instructions are stored in the buffer, the instructions are simply operated on in the order that they are stored.).

8. Referring to claim 7, Cmelik has taught a processor with the improvement wherein the program codes are completely translated into the sequence of instruction words during a configuration phase for execution in a subsequent execution phase (In Cmelik the instructions are translated and then the instructions are executed. See column 19, lines 52-65. The translation, or configuration stage, precedes the execution phase of the instructions.), wherein there is provided a memory for storing instruction word parts corresponding to data-stationary commands, said instruction word parts being stored during the configuration phase at a location corresponding to a complex word pointer corresponding to a data-stationary command (Cmelik column 9 lines 51-65, Figures 2 and 8, column 19 line 31-column 20 line 4, The address of the sequence that has already been translated as the branch address for the particular condition controlling the branch. Wherein" data-stationary commands" is interpreted from page 2 in the specification as a command that does not have definite information by what route a processor is to execute the command, which is taught since Cmelik teaches multiple units for memory,

integer and fp commands.), and wherein said memory is arranged to directly transfer said complex word parts to corresponding rows and columns of said buffer memory in parallel to execute a data-stationary command (Cmelik, Figure 2 and 8, column 19 line 31-column 20 line 54, In Cmelik the instructions are translated and then the instructions are executed. See column 19, lines 52-65. The translation, or configuration stage, precedes the execution phase of the instructions. Instructions are translated and stored in the rows and columns of translation buffer, element 14. Separate instructions are stored in rows of the translation buffer and the instruction code bits of the instructions are stored in the columns of the translation buffer. As shown in figure 6c the commands are sent to the corresponding execution units in parallel.) during the subsequent execution phase (Cmelik, Figure 2 and 8, column 19 line 31-column 20 line 54, In Cmelik the instructions are translated and then the instructions are executed. See column 19, lines 52-65. The translation, or configuration stage, precedes the execution phase of the instructions.).

9. Referring to claim 8, Cmelik has taught the improved processor as specified in claim 7, further having an execution memory wherein instruction word sequences are stored in the form of program words, and wherein there is provided a configuration processor for storing said complex word pointers as program words in said execution memory for data-stationary commands (Cmelik figure 7, column 15 line 21-column 16 line 34; As shown in figure 7, once the words are translated they are added to the buffer so that they can be used again without translating them again. The translated instrctions would require some address or index in the buffer. The commands are in the form of program words).

Response to Arguments

10. Applicant's arguments filed March 13, 2006 have been fully considered but they are not persuasive.

11. On pages 5 and 6, Applicant argues in essence:

"Cmelik describes a procedure for translation according to conditional branches during program execution. See col. 19, ln. 31-col. 20, ln 4. This is in contrast to applicants' unconditional translation, which occurs not contemporaneously, but beforehand."

However, Applicant has claimed an execution phase and a preceding configuration phase. In order for instructions to be executed they must necessarily be translated, or configured, first and then executed. In Cmelik instruction translating is a prerequisite to instruction execution (See Figure 7). Therefore this argument is moot.

12. On page 6, Applicant argues in essence:

"Cmelik et al. does not relate to "complex words" which are required by applicants' claims."

However, Cmelik has taught very long instruction words (VLIW) (column 9, lines 51-65). VLIW instructions contain several primitive instructions. VLIW instructions are complex to the extent that several primitive instructions are contained therein. Therefore this argument is moot.

13. On page 6, Applicant argues in essence:

"As described on the specification [0005], in the prior art execution of a data-stationery command various steps are carried out in several beats

...

This entails a large memory utilization and considerable processing time."

However, Applicant is arguing features of the invention not specifically stated in the claim language, which is improper. Claimed subject matter, not the specification, is the

measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11,15 (CCPA 1978).

> *"It is the claims that measure the invention." SRI Int'l v. Matshshita Elec. Corp., 775 F.2d 1107, 1121, 227 USPQ 577, 585 (Fed. Cir. 1985) (en banc).*
>
> *"The invention disclosed in Hiniker's written description may be outstanding in its field, but the name of the game is the claim." In re Hiniker Co., 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).*
>
> *"[A]s an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." In re Morris, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).*
>
> *"limitations appearing in the specification will not be read into the claims, and ... interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper'." Intervet Am., v. Kee-Vet Labs., 12 USPQ2d 1474, 1476 (Fed. Cir. 1989)(citation omitted).*
>
> *"it is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim, ... this is not to be confused with adding an extraneous limitation appearing in the specification, which is improper. By 'extraneous,' we mean a limitation read into a claim from the specification wholly apart from any need to interpret ... particular words or phrases in the claim." In re Paulsen, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (citation omitted).*

If Applicant would like specific limitations read into the claims, then Applicant should specifically claim those limitations. Therefore this argument is moot.

14. On page 7, Applicant argues in essence:

"The features of applicants' invention, namely (1) "during the preceding configuration phase instruction word parts corresponding to data-stationary commands splitted on several instruction words are assembled as complex words in a complex sequence," (claim 4) and (2) that the "complex words are read from said complex word table and

stored in parallel in the corresponding rows and columns of said secondary instruction word memory" (claims 4 and 7) are not shown or suggested by Cmelik."

However, Cmelik has in fact taught *(1) "during the preceding configuration phase instruction word parts corresponding to data-stationary commands splitted on several instruction words* (column 9, lines 51-65, Commands of several instruction words are translated, optimized, reordered, and rescheduled.) *are assembled as complex words in a complex sequence," (claim 4)*(Cmelik column 9 lines 51-65, Several instruction words are translated, optimized, reordered, and rescheduled into very long instruction words. Very long instruction words are assembled sequences of complex words.) *and (2) that the "complex words are read from said complex word table and stored in parallel in the corresponding rows and columns of said secondary instruction word memory" (claims 4 and 7)* (Cmelik, Figure 2 and 8, column 19 line 31-column 20 line 54, Instructions are translated and stored in the rows and columns of translation buffer, element 14. Separate instructions are stored in rows of the translation buffer and the instruction codes and address bits of the instructions are stored in the columns of the translation buffer.). Also see the rejections above for claims 4 and 7 in paragraphs 5 and 8 above. Therefore this argument is moot.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L. Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday, with every other Friday off.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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